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KNOBLE, YOSHIDA & DUNLEAVY
EIGHT PENN CENTER
SUITE 1350, 1628 JOHN F KENNEDY BLVD
PHILADELPHIA, PA 19103

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BARQADLE, YASIN M

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PAPER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BOB JANSSEN and PETER GERARDUS JANSEN

Appeal 2009-003272
Application 10/040,149
Technology Center 2400

Decided: September 2, 2009

Before KENNETH W. HAIRSTON, JOHN C. MARTIN, and
BRADLEY W. BAUMEISTER, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134 (2002) from the Examiner's final rejection of claims 1-10, 18, and 19. We have jurisdiction under 35 U.S.C. § 6(b). Oral argument was held on August 12, 2009.¹ Only those arguments supported by the Appeal Brief and Reply Brief² have been considered.³

(1) We reverse the rejections of claims 1-10 and 18 under 35 U.S.C. §§ 102 and 103, but pursuant to our authority under 37 C.F.R. § 41.50(b), we enter a new ground of rejection under 35 U.S.C. § 112, ¶ 2.

(2) We affirm the rejection of claim 19 under 35 U.S.C. § 102 as being anticipated by Frese.

(3) We reverse the rejection of claim 19 under 35 U.S.C. § 103 as being obvious over Willems.

Appellants' invention relates to a server-based computing system comprising at least one server and at least one client computer connected to the server through a network. Abstract. The server runs an interface management software program that provides the client computer with a server-based user interface to applications running on the server. Spec. 4, 6. The client computer includes an input device, such as a keyboard, and a display device, such as a computer monitor. Spec. 5-6. The client computer

¹ A transcript of the oral argument will be added to the record in due course.

² Throughout this decision we refer to (1) the Appeal Brief filed Jan. 2, 2008; (2) the Examiner's Answer mailed Feb 21, 2008; and (3) the Reply Brief filed Apr. 21, 2008.

³ "[A]rguments not presented in the brief or reply brief and made for the first time at the oral hearing are not normally entitled to consideration." MPEP § 1205.02 (8th ed., rev. 7, July 2008) (citing *In re Chiddix*, 209 USPQ 78 (Comm'r Pat. 1980)).

also runs a subscriber interface software program that facilitates the integration of client-based applications in the server-based user interface. Spec. 6. The subscriber program running on the client computer co-operates with the server's interface management program in the exchange between the server and client computer of user input to the interface and output from the interface. *Id.*

The server further comprises hardware, such as processors, RAM, hard disks, or other storage means, for running several so-called demanding applications concurrently on the server. Spec. 3-4. The client computer also comprises processors, memory, and data storage for running other applications locally on the client computer. *Id.*

The system is configured to enable the server to control the display on a screen of the display device of a screen area having contents that were generated locally on the client computer. App. Br. 3. Appellants' computer system makes it possible for a system manager to centrally manage the user interface. *Id.* The system also makes it possible to integrate local and central computing environments so that a user will not notice any difference between locally and centrally run applications, thereby obviating the need to switch between separate user interfaces or to overlay one user interface over another. *Id.*

The Examiner relies on the following prior art references to show unpatentability:

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| Frese, II | US 5,909,545 | June 1, 1999 |
|-----------|--------------|--------------|

| | | |
|---------|--------------|---------------|
| Willems | US 5,613,090 | Mar. 18, 1997 |
|---------|--------------|---------------|

Scott Ambler, *Designing Web-Based User Interfaces*, DR. DOBB'S PORTAL, Mar. 1, 2001, <http://www.ddj.com/architect/184414719>.

Claims 1-10, 18, and 19 stand rejected under 35 U.S.C. § 102(b) as anticipated by Frese, II (“Frese”).

Claims 1-10, 18, and 19 stand rejected under 35 U.S.C. § 103(a) as obvious over Willems.

I. CLAIMS 1-10 AND 18

Representative claim 1 (emphasis added) is reproduced below.⁴ The language at issue is italicized.

1. A server-based computing system, comprising at least one server (1) and at least one client computer (5), connected to the server (1) through a network (2), wherein the server (1) comprises *means for providing the client computer (5) with a user interface*, wherein the client computer (5) comprises an input device (8) for providing input to an application through the user interface and a display device (7) for presenting output from an application through the user interface, wherein the server (1) comprises means for running the application, wherein the client computer (5) comprises means (6) for locally running at least one further application, wherein the system comprises *means for controlling the locally run applications through the user interface provided by the server (1)*, and is configured to enable the server (1) to control the display on a screen of the display device (7) of a screen area having contents generated locally on the client computer.

ISSUE

The first issue before us is: With respect to the “means-plus-function” limitation (“means for providing the client computer . . . with a user interface”) of independent claim 1, and further regarding the “means-plus-

⁴ Appellants argue various claims separately. *See* App. Br. 7-25. However, for the reasons set forth below, we treat claims 1-10 and 18 as a first claim group and claim 19 as a second claim group. We select claim 1 as representative of the first group. *See* 37 C.F.R. § 41.37(c)(1)(vii).

function” limitation (“means for controlling the locally run applications through the [‘a’ in claim 18] user interface provided by the server”) of independent claims 1 and 18, does Appellants’ Specification set forth sufficient corresponding structures so as to satisfy the requirements of 35 U.S.C. § 112 ¶ 6?

FINDINGS OF FACT

The record supports the following Findings of Fact (FF) by a preponderance of the evidence:

1. The claimed “means for providing the client computer . . . with a user interface” corresponds to Appellants’ interface management program. Spec. 4, 6-10; App. Br. 2-3. The claimed “means for controlling the locally run applications through the user interface provided by the server” corresponds to Appellants’ subscriber interface program. Spec. 4, 6-10; App. Br. 2-3.
2. The Specification states (Spec. 6): “In the system according to the invention, the server 1 runs an interface management program in order to provide the client computers 3-5 with the user interface. The client computer 5 runs a subscriber program that facilitates the integration of client-based applications in the server-based user interface.”
3. The Specification further states (Spec. 11-12):

Turning now to Fig. 3, a more detailed description of the process, by which the running of an application on the client computer 5 is initiated, will be given. The process is started in a first step 22, by a user clicking on one of the icons 14, 15 for initiating locally run applications. The interface management program processes this input. Once it has been determined that the icon is associated with a local application on the client computer 5, a message is sent in a subsequent step 23 to the client computer 5, to check that the subscriber program is

running. In a next step 24, the client computer 5 returns an acknowledgement message, generated using the subscriber program, to the effect that the subscriber program is running.

The interface management program on the server 1 generates a message, containing a command line, which is sent to the client computer 5 in a subsequent step 25. In a next step 26, the locally running application is launched on the client computer 5 by executing the command line.

The locally running application generates its window 19, which first appears in the local client screen area 9. As the merged local client screen 16 is automatically updated, the window 19 also appears in the merged local client screen 16. The creation of the local application window 19 is symbolically depicted in step 27 of Fig. 3.

In a step 28 subsequent upon the creation of the local window 19, the subscriber program generates a message, signalling [sic] the creation of a new application window, which message is passed on to the server 1. This is the cue for a last step 29 in the flow chart of Fig. 3, namely the addition of the button 20 to the central task bar 11 in the merged local client screen 16. The local application is now fully integrated into the user interface and the situation depicted in Fig. 2C has been arrived at.

PRINCIPLES OF LAW

“Before considering the rejections . . . , we must first [determine the scope of the] claims” *In re Geerdes*, 491 F.2d 1260, 1262 (CCPA 1974).

“The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” 35 U.S.C. § 112, ¶ 2.

The test for definiteness under 35 U.S.C. § 112, ¶ 2, is whether “those skilled in the art would understand what is claimed when the claim is read in

light of the specification.” *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations omitted).

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112, ¶ 6.

The sixth paragraph of 35 U.S.C. § 112 has just as much application during proceedings before the U.S. Patent and Trademark Office as it does in district court cases for infringement matters. *In re Donaldson Co., Inc.*, 16 F.3d 1189, 1194 (Fed. Cir. 1994) (en banc).

When a claim uses the term “means” to describe a limitation, a presumption inheres that the inventor used the term to invoke § 112, ¶ 6. *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1375 (Fed. Cir. 2003). “This presumption can be rebutted where the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety.” *Id.* (citation omitted).

Once a court concludes that a claim limitation is a means-plus-function limitation, two steps of claim construction remain: 1) the court must first identify the function of the limitation; and 2) the court must then look to the Specification and identify the corresponding structure for that function. *Med. Instrumentation & Diagnostics Corp. v. Elekta AB*, 344 F.3d 1205, 1210 (Fed. Cir. 2003).

As set forth in *Default Proof*:

“[I]f one employs means-plus-function language in a claim, one must set forth in the specification an adequate disclosure showing what is meant by that language. If an applicant fails to

set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph of section 112.” *In re Donaldson Co.*, 16 F.3d 1189, 1195 (Fed. Cir. 1994) (en banc). “The specification must be read as a whole to determine the structure capable of performing the claimed function.” *Budde v. Harley-Davidson, Inc.*, 250 F.3d 1369, 1379 (Fed. Cir. 2001). A structure disclosed in the specification qualifies as “corresponding” structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. *B. Braun Med. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). This duty to link or associate structure to function is the *quid pro quo* for the convenience of employing § 112, ¶ 6. *See O.I. Corp. v. Tekmar Co.*, 115 F.3d 1576, 1583 (Fed. Cir. 1997). “Fulfillment of the § 112, ¶ 6 trade-off cannot be satisfied when there is a total omission of structure.” *Atmel [Corp. v. Info. Storage Devices, Inc.]*, 198 F.3d [1374,] 1382 [(Fed. Cir. 1999)]. While corresponding structure need not include all things necessary to enable the claimed invention to work, it must include all structure that actually performs the recited function. *See Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002).

Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc., 412 F.3d 1291, 1298 (Fed. Cir. 2005).

“If there is no structure in the specification corresponding to the means-plus-function limitation in the claims, the claim will be found invalid as indefinite.” *Biomedino, LLC v. Waters Techs. Corp.*, 490 F.3d 946, 950 (Fed. Cir. 2007) (citation omitted).

While the specification must contain structure linked to claimed means, this is not a high bar: “[a]ll one needs to do in order to obtain the benefit of [§ 112, ¶ 6] is to recite some structure corresponding to the means in the specification, as the statute states, so that one can readily ascertain what the claim means and comply with the particularity requirement of [§ 112,] ¶ 2.” *Atmel*, 198 F.3d at 1382.

Biomedino, 490 F.3d at 950.

In a means-plus-function claim in which the disclosed structure is a computer or microprocessor programmed to carry out an algorithm, the Specification need not “produce a listing of source code or a highly detailed description of the algorithm to be used to achieve the claimed functions in order to satisfy 35 U.S.C. § 112 ¶ 6.” *Aristocrat Techs. Austl. Pty Ltd. v. Int’l Game Tech.*, 521 F.3d 1328, 1338 (Fed. Cir. 2008). However, the Specification must “at least disclose the algorithm that transforms the general purpose microprocessor to a ‘special purpose computer programmed to perform the disclosed algorithm.’” *Id.* (citing *WMS Gaming, Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1349 (Fed. Cir. 1999)).

For a patentee to claim a means for performing a particular function and then to disclose only a general purpose computer as the structure designed to perform that function amounts to pure functional claiming. Because general purpose computers can be programmed to perform very different tasks in very different ways, simply disclosing a computer as the structure designated to perform a particular function does not limit the scope of the claim to “the corresponding structure, material, or acts” that perform the function, as required by section 112 paragraph 6.

Id. at 1333.

[T]he proper inquiry for purposes of section 112 paragraph 6 analysis is to “look at the *disclosure* of the patent and determine if one of skill in the art would have understood that *disclosure* to encompass software [to perform the function] and been able to implement such a program, not simply whether one of skill in the art would have been able to write such a software program.’

Id. at 1337 (citing *Med. Instrumentation*, 344 F.3d at 1212) (alteration in original). If a person of ordinary skill in the art recognizes the patent as not

disclosing any algorithm at all, the means-plus-function limitation lacks sufficient disclosure of structure under 35 U.S.C. § 112 ¶ 6 and is therefore indefinite under 35 U.S.C. § 112 ¶ 2. *Id.* at 1338.

ANALYSIS

Independent claim 1 recites, among others, the following two limitations: (i) “means for providing the client computer . . . with a user interface,” and (ii) “means for controlling the locally run applications through the user interface provided by the server.” Independent claim 18 recites the second one of these two limitations. Appellants acknowledge that both of these limitations constitute “means-plus-function” limitations in accordance with 35 U.S.C. § 112, ¶ 6. App. Br. 2, 5. The claimed “means for providing the client computer . . . with a user interface” corresponds to Appellants’ interface management program. FF 1. The claimed “means for controlling the locally run applications through the user interface provided by the server” corresponds to Appellants’ subscriber interface program. FF 1.

Appellants’ Specification indicates that the interface management program is a software program that is run on the server. FF 2. The Specification also indicates that the subscriber interface program is a counterpart software program that is run on the client computer. FF 2. In order for the claims to satisfy the definiteness requirement of 35 U.S.C. 112 ¶ 2, then, the Specification must set forth algorithms used for these two software programs. *Aristocrat*, 521 F.3d at 1338.

Appellants’ Specification does describe the process by which the running of an application on the client computer is initiated. FF 3. The

Specification also describes functions and purposes of both the interface management software program and the subscriber interface software program. Spec. 2-11. However, disclosing a software program's function or purpose is not the same thing as, or a substitute for, disclosing "the corresponding structure, material, or acts' that perform the functions, as required by section 112 paragraph 6." *Aristocrat*, 521 F.3d at 1333. Appellants' Specification simply does not set forth any algorithms or corresponding structure for either of these two software programs.

For the foregoing reasons, the Specification does not provide the corresponding algorithm or structure that is required by 35 U.S.C. 112 ¶ 6 for claiming software in means-plus-function form. We therefore find independent claims 1 and 18 to be indefinite and we hereby institute a new ground of rejection of claims 1 and 18 under 35 U.S.C. 112 ¶ 2. *See id.* We likewise find dependent claims 2-10, which ultimately depend from independent claim 1, to be indefinite as well and the new ground of rejection extends to dependent claims 2-10.

For the reasons expressed in this opinion, claims 1-10 and 18 are indefinite. Therefore, the prior art rejections must fall, *pro forma*, because they necessarily are based on speculative assumptions as to the meaning of the claims. *See In re Steele*, 305 F.2d 859, 862-63 (CCPA 1962). It should be understood, however, that our decision to reverse the Examiner's prior art rejections of claims 1-10 and 18 is based solely on the indefiniteness of the claimed subject matter and does not reflect on the adequacy of the prior art evidence applied in support of the rejections of these claims.

II. THE ANTICIPATION REJECTION OF CLAIM 19 OVER FRESE

Independent claim 19 (footnote added) is reproduced below:

19. A computer program stored on a computer readable medium, wherein the computer program can be loaded onto a [client] computer,⁵ the computer being connected through a network (2) to a server (1), and comprising an input device for providing input to an application through a user interface and a display device for presenting output from an application through the user interface, wherein the server (1), comprises means for running an application, and wherein the computer comprises means (6) for locally running at least one further application, wherein the computer program, when run on the computer, causes the computer to accept the user interface, the user interface being configured for controlling the at least one locally run application and being provided by the server, and further causes the computer to display a screen area having contents generated locally on the client computer according to display properties specified by the server (1).

ARGUMENTS AND ISSUE

Frese discloses a computer system and method for on demand downloading of a remote display module to a client computer to enable remote control of an application over a computer network. Frese, Title. In rejecting claim 19 as anticipated by Frese, the Examiner finds, *inter alia*, that: (1) the “client computer” referenced in claim 19 reads on Frese’s user system 16; (2) the claimed “computer program” reads on Frese’s browser 30, which is loaded onto the user system 16; (3) the referenced “user interface” reads on Frese’s web page (or HTML documents) that may be loaded onto or accessed by the browser; (4) the referenced “server” reads on

⁵ In light of the last limitation of claim 19, “[wherein the computer program] further causes the computer to display a screen area having contents generated locally on the *client* computer according to display properties specified by the server” (emphasis added), we interpret the preceding clause to intend to read, “wherein the computer program can be loaded onto a *client* computer.”

Frese's remote application server (RAS) 20; and (5) the referenced "locally running application" reads on Frese's RDM applets 18. Ans. 22. The Examiner reasons: "Because the server provides the applet tags and their parameters that the client is able to select, the server ultimately *controls* the look and feel of the applet that is run by the client." Ans. 23-24 (emphasis added).

Appellants assert⁶ that Frese does not disclose either (1) "a computer program that, when run on the computer, causes the computer to accept a user interface provided by the server for controlling the locally run applications"; or (2) "a system which displays a screen area having contents generated locally on the client computer according to display properties specified by the server." App. Br. 17. More specifically, Appellants argue that Frese's web page (or HTML document) cannot constitute the recited "user interface" because Frese's web page does not *control* the RDM (Reply Br. 8): the "[m]ere transmission of information" is not "control." Rep. Br. 7.

The issue before us, then, is: Have Appellants shown that the Examiner erred in interpreting the meaning of the claim term "controlling"?

PRINCIPLES OF LAW

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of

⁶ Rather than repeat the arguments of Appellants or the Examiner, we refer to the Briefs and the Answer for their respective details. In this decision, we have considered only those arguments actually made by Appellants. Arguments which Appellants could have made but did not make in the Briefs have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii).

obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966) (noting that 35 U.S.C. § 103 leads to three basic factual inquiries: (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; and (3) the level of ordinary skill in the art). Furthermore, the Examiner's obviousness rejection must be based on

“some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)). If the Examiner's burden is met, the burden then shifts to Appellants to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

ANALYSIS

Appellants' arguments in relation to claim 19 all center around the meaning of the term “controlling” as it is used in the phrase “the user interface being configured for *controlling* the at least one locally run application” (emphasis added). What definition is afforded the term “controlling” dictates whether the components of Frese noted by the Examiner anticipate the claimed and referenced elements of claim 19. We

must therefore first interpret the meaning of the term “controlling.” *See Geerdes*, 491 F.2d at 1260.

The Examiner’s position is that the server “controls” a locally running application if the server merely initially transmits or provides applet tags and their parameters, thereby dictating the look and feel of the locally run applet. Ans. 23-24. Having set forth a potential definition for the term “controlling” then, the Examiner has established a prima facie case of anticipation. The burden of rebuttal has therefore shifted to Appellants.

Appellants though, have not met their burden of showing why the Examiner’s definition would not be considered by one of ordinary skill in the art to be a reasonable one. Appellants solely argue that “[t]ransmitting an executable program for providing the user interface is not control of the user interface.” Reply Br. 3. However, this argument merely constitutes an unsupported conclusion. Appellants have not offered any alternative definition for what acts constitute “controlling.” Nor does Appellants’ Specification contain any express definition for the claim term “controlling.” *See Spec.* 1-12.

It is well settled that the claims must be interpreted during examination as broadly as their terms reasonably allow. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1369 (Fed. Cir. 2004). Appellants always have the opportunity to amend the claims during prosecution, and broad interpretation by the Examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05 (CCPA 1969). For the foregoing reasons then, Appellants have not persuaded us of error in the Examiner’s rejection of

claim 19 under § 102 based upon Frese. We therefore sustain the Examiner's § 102 rejection of that claim.

III. THE OBVIOUSNESS REJECTION OF CLAIM 19 OVER WILLEMS ARGUMENTS AND ISSUES

In making the separate, obviousness rejection over Willems, the Examiner finds:

Willems teaches a computer program stored on a computer readable medium, wherein the computer program can be loaded onto a computer, the computer being connected through a network to a server (X server), and comprising an input device for providing input to an application (X applications) through a user interface (window manager 100) and a display device for presenting output from an application (X applications) through the user interface (window manager 100), wherein the server (X server), comprises means for running an application (X applications). (see Willems at fig. 8; col. 13, ll. 39-58).

Ans. 12. The Examiner then concludes that it would have been obvious to one of ordinary skill in the art to make the following modifications to the prior art window manager depicted in Figure 8: (1) installing the windows manager on the same computer as the X server 102; (2) providing means for running local applications; and (3) enabling a window manager (i.e., a user interface) to control locally run applications. Ans. 12-13.

In response, Appellants first argue that Willems teaches away from installing the windows manager on the X server because “this proposed modification is not consistent with the teachings of Willems. . . . Willems relies on the same reasoning relied on by the Examiner to modify the prior art embodiment of Figure 8,” but instead modifies the prior art in a manner different from the present invention to arrive at Willems's embodiment of

Figure 9. App. Br. 19. Appellants also argue that the Examiner's proposed modification of placing the windows manager on the X server directly contradicts Willems's primary stated goal of reducing network traffic. App. Br. 20. Further,

Willems does not disclose that combining X server 102 with window manager 100 would decrease network traffic and thus this conclusion is pure speculation by the Examiner. Second, Willems does not even disclose whether it is possible to combine X server 102 and window manager 100 as the Examiner suggests.

Reply Br. 10.

In response to the Examiner's second and third proposed modifications, Appellants argue that "Willems does not teach that the window manager 100 can be enabled to control locally run applications, but rather only teaches use of window manager 100 to control remotely run applications." Reply Br. 13. Appellants additionally argue that (1) the Examiner's conclusion—that one of ordinary skill in the art would readily recognize that enabling the remote window manager 100 to control locally run applications would clearly enable the system designer to eliminate code at the client side—is pure speculation and is not supported by any evidence; and further (2) "[t]here is no teaching in Willems that window manager 100 can or should control locally run applications or that front-end code could be reduced by doing so." Reply Br. 13-14.

The next two issues before us, then, are:

(1) Have Appellants shown that the Examiner erred in concluding that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willems's prior art computer system so as to install the windows manger on the same computer as the X server?

(2) Have Appellants demonstrated that the Examiner failed to establish a prima facie showing that it would have been further obvious to one of ordinary skill in the art at the time of the invention to additionally (i) provide means for running local applications, and (ii) enable the server's window manager to control these locally run applications?

PRINCIPLES OF LAW

To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *See In re Royka*, 490 F.2d 981, 985 (CCPA 1974).

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). "The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another." *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000).

FINDINGS OF FACT

4. Willems states (col. 13, ll. 39-58):

In a pure "X WINDOWS" environment, the manipulation of windows on the screen and much of the user interface is provided by a window manager client. The window

manager client (which can run either locally or remotely) is an “X WINDOWS” application . . . , as shown in FIG. 8.

. . . If the window manager 100 is run remotely, a performance hit is taken because of the additional traffic between the window manager 100 and the “X WINDOWS” application 18, 20 and 22 and between the window manager 100 and the X server 102.

5. The Examiner states (Ans. 29):

The examiner disagrees with [Appellants'] statement that Willems teaches that the amount of front-end code would not be reduced when control of locally run applications is handled by window manager 100. Willems does not address the result of enabling a remote window manager to control the locally run applications. One of ordinary skill in the art is not an automaton. One of ordinary skill would readily recognize that enabling the remote window manager to control locally run applications would clearly enable the system designer to eliminate code at the client side.

ANALYSIS

The first modification of Willems proposed by the Examiner is to install the window manager on the same computer as the X server 102. Ans. 12. The Examiner's stated motivation for this modification is to avoid a performance hit, which Willems teaches is desirable. Ans. 12. Accordingly, the Examiner has established a prima facie showing of obviousness. The burden of rebuttal has shifted to Appellants.

The initial question, then, is: Have Appellants shown that the Examiner erred in concluding that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Willems's prior art computer system so as to install the windows manger on the same computer as the X server? Appellants argue that Willems teaches away

from making such a modification, and that the Examiner's modification is based solely upon speculation. *See, e.g.,* Reply Br. 10. Appellants' arguments are not persuasive.

The fact that Willems, based upon considerations relating to network traffic and the requisite amount of front-end code, chose to modify the prior art computer system of Figure 8 in one particular manner so as to arrive at the inventive embodiment of Figure 9, does not necessarily mean that Willems teaches away from all alternative modifications. *See Winner Int'l Royalty*, 202 F.3d at 1349 n.8. To the contrary, Willems expressly states that the window manager client (or "window manager") of the Figure 8 prior art embodiment can be run either locally or remotely. FF 4. Moreover, this express disclosure is in no way negated by Willems's further discussion of relative benefits regarding system performance and the requisite amount of front-end code that results from running the window manager locally. The fact remains: Willems expressly discloses that the window manager may be located either locally or remotely.

As such, the issue raised by the Examiner's rejection is *not*: Did motivation exist to modify Willems's prior art embodiment so as to alternatively locate the window manager remotely from the client computer? Willems already teaches this. Rather then, the issue is: Given that Willems expressly states that the window manager of the prior art embodiment may be located either locally or remotely from the client computer, would it have been obvious to one of ordinary skill the art at the time of the invention to have located such a disclosed, remotely-located window manager specifically within the server? Appellants have only argued the first issue; they have not addressed the relevant, second issue. *See App. Br. 17-22*;

Reply Br. 10-12. As such, Appellants have not met their burden of demonstrating error in the Examiner's rejection.

We therefore turn to the second issue raised by the obviousness rejection over Willems: Have Appellants demonstrated that the Examiner failed to establish a *prima facie* showing that it would have been further obvious to one of ordinary skill in the art at the time of the invention to additionally (i) provide means for running local applications, and (ii) enable the server's window manager to control these locally run applications? We find Appellants' arguments to be persuasive.

Appellants argue that "[t]here is no teaching in Willems that window manager 100 can or should control locally run applications or that front-end code could be reduced by doing so." Reply Br. 14; *see also* Req. for Reconsid., filed June 10, 2007, at 9-11. The Examiner does not dispute that this claim element is missing from Willems: "Willems does not address the result of enabling a remote window manager to control the locally run applications." FF 5. Rather, the Examiner notes that "[o]ne of ordinary skill in the art is not an automaton," and therefore concludes that "[o]ne of ordinary skill would readily recognize that enabling the remote window manager to control locally run applications would clearly enable the system designer to eliminate code at the client side." FF 5.

The Examiner has effectively, then, taken Official Notice of a fact that is unsupported by documentary evidence. *See* MPEP § 2144.03. But by arguing that this claim element is missing from Willems and by providing a technical rationale for why one of ordinary skill would not have made this modification (*see, e.g.*, Req. for Reconsid., filed June 10, 2007, at 9-11), Appellants have effectively seasonably traversed the Examiner's taking of

Official Notice. *See* MPEP § 2144.03(C). The Examiner was therefore required to support the finding with adequate evidence on the record. *See In re Zurko*, 258 F.3d 1379, 1385 (Fed. Cir. 2001) (noting that an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support); MPEP § 2144.03(C). The Examiner did not. As such, the Examiner has not established a prima facie case of obviousness. *See Royka*, 490 F.2d at 985.

For the foregoing reasons, then, Appellants have persuaded us of error in the Examiner's rejection of claim 19 under section § 103 based upon Willems. We therefore reverse the Examiner's § 103 rejection of that claim.

DECISION

(1) We reverse the rejections of claims 1-10 and 18 under 35 U.S.C. §§ 102 and 103, but we enter a new ground of rejection under 35 U.S.C. § 112, ¶ 2.

(2) We affirm the rejection of claim 19 under 35 U.S.C. § 102 as being anticipated by Frese.

(3) We reverse the rejection of claim 19 under 35 U.S.C. § 103 as being obvious over Willems.

FINALITY OF DECISION

Regarding the affirmed rejection(s), 37 C.F.R. § 41.52(a)(1) provides that "Appellant may file a single request for rehearing within two months of the date of the original decision of the Board."

This decision contains new grounds of rejection pursuant to 37 C.F.R. § 41.50(b) (2007). This regulation states that "[a] new ground of rejection

pursuant to this paragraph shall not be considered final for judicial review.” Furthermore, 37 C.F.R. § 41.50(b) also provides that Appellants, WITHIN TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of the following two options with respect to the new grounds of rejection to avoid termination of the appeal as to the rejected claims:

(1) *Reopen prosecution.* Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . . .

(2) *Request rehearing.* Request that the proceeding be reheard under § 41.52 by the Board upon the same record.

Should Appellants elect to prosecute further before the Examiner pursuant to 37 C.F.R. § 41.50(b)(1), in order to preserve the right to seek review under 35 U.S.C. §§ 141 or 145 with respect to the affirmed rejection, the effective date of the affirmance is deferred until conclusion of the prosecution before the Examiner unless, as a mere incident to the limited prosecution, the affirmed rejection is overcome.

If Appellants elect prosecution before the Examiner and this does not result in allowance of the application, abandonment, or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for rehearing thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

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AFFIRMED-IN-PART
37 C.F.R. § 41.50(b)

babc

KNOBLE, YOSHIDA & DUNLEAVY
EIGHT PENN CENTER
SUITE 1350, 1628 JOHN F KENNEDY BLVD
PHILADELPHIA PA 19103